

DATES & DATA

July 18

Scuba club meets: The Lunarfans meet at 7:30 p.m. For more information contact Mike Manering at x32618 or checkout www4.jsc.nasa.gov/ah/exceaa/leisure/Lunarfans/default.htm

Spaceteam Toastmasters meet: The Spaceland Toastmasters meets on Wednesday mornings at 7 a.m. at the House of Prayer Lutheran Church 1515 Bay Area Blvd at Reseda. For details, contact Ava Sloan at 713-768-6336 or asloan@hal-pc.org

Spaceteam Toastmasters meet: The Spaceteam Toastmasters meet at 11:30 a.m. at United Space Alliance, 600 Gemini. For details contact Patricia Blackwell at 281-280-6863.

July 19

Communicators meet: The Clear Lake Communicators, a Toastmasters International club, meets at 11:30 a.m. at Wyle Laboratories, 1100 Hercules, Suite 305. For details contact Allen Prescott at 281-282-3281 or Richard Lehman at 281-280-6557.

July 26

Radio Club meets: The JSC Amateur Radio Club meets at 6:30 p.m. at Piccadilly, 2465 Bay Area Blvd. For details contact Larry Dietrich at x39198.

August 2

Warning System Test: The site-wide Employee Warning System performs its monthly audio test at noon. For details contact Bob Gaffney at x34249.

August 6

CLA-NSS meets: The Clear Lake area chapter of the National Space Society meets at 6:30 p.m. at the Parker Williams Branch of the Harris County Library at 10851 Scarsdale Blvd.

For details contact Murray Clark at 281-367-2227.

NSBE meets: The National Society of Black Engineers meets at 6:30 p.m. at Texas Southern University, School of Technology, first floor. For more information contact Kimberly Topps at 281-280-2917.

August 7

Quality Society meets: The Bay Area Section of the American Society for Quality meets at 6 p.m. at the Franco's Restaurant. For more information contact Ann Dorris at x38620.

August 8

MAES meets: The Society of Mexican-American Engineers and Scientists meets at 11:30 a.m. in Bldg. 16, Rm. 111. For details contact Margaret C. Delgado at 713-643-6097 or mcdelgad@aol.com.

August 9

Airplane Club meets: The Radio Control Airplane Club meets at 7 p.m. at the Clear Lake Park building. For more information contact Bill Langdoc at x35970.

August 13

Aero Club meets: The Bay Area Aero Club meets at 7 p.m. at the Houston Gulf Airport clubhouse at 2750 FM 1266 in League City. For more information contact Larry Hendrickson at x32050 or checkout www.bayareaaeroclub.org

IAAP meets: The Clear Lake/NASA Chapter of the International Association of Administrative Professionals meets at 5:30 p.m. in the Colonial Room at Grace Community Church, 14325 Crescent Landing. Cost is \$12 payable at the door with advance reservations through Jackie L. Almanza at 281-244-7274. See www.iaap-clnac.org for more information.

GILRUTH CENTER NEWS

Sign-up policy:

All classes and athletic activities are on a first-come, first-served basis. Sign up in person at the Gilruth Center and show a yellow Gilruth or weight room badge. Classes tend to fill up two weeks in advance. Payment must be made in full, by cash or by check, at the time of registration. No registration will be taken by telephone. For more information, call x33345.

Gilruth badges:

Required for use of the Gilruth Center. Employees, spouses, eligible dependents, NASA retirees and spouses may apply for photo identification badges from 7:30 a.m.-9 p.m. Monday-Friday and 9 a.m.-2 p.m. Saturdays. Cost is \$14. Dependents must be between 16 and 23 years old.

Open from 6:30 a.m. to 10 p.m. Monday-Thursday, 6:30 a.m. to 9 p.m. Friday, and 9 a.m. to 2 p.m. Saturday. Contact the Gilruth Center at (281) 483-3345. <http://www4.jsc.nasa.gov/ah/exceaa/Gilruth/Gilruth.htm>

Nutrition intervention program: This is a free seven-week program designed to provide an understanding of the role diet and nutrition play in health. The program includes a series of lectures and private consultations with a dietitian. You will learn how to use dietary vitamins, minerals and herbal nutraceuticals for optimizing health. Classes are held on Wednesdays from 4-5 p.m. For details call Tammie Labiche, registered dietitian, at (281) 483-2980.

Defensive driving: One-day course is offered once a month at the Gilruth Center. Pre-registration required. Cost is \$25. Call for next available class.

Stamp club: Meets every second and fourth Monday at 7 p.m. in Rm. 216.

Weight safety: Required course for employees wishing to use the Gilruth weight room. Pre-registration is required. Cost is \$5. Annual weight room use fee is \$110. The cost for additional family members is \$58.

Exercise: Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays. Cost is \$24 for eight weeks.

Step/bench aerobics: Low-impact cardiovascular workout. Classes meet from 5:25-6:25 p.m. Tuesdays and Thursdays. Cost is \$40 for eight weeks.

Cardio-Kickboxing: Medium impact. Learn basic kicking and punching. Tuesday and Thursday 5:30-6:30 p.m. Cost is \$40 for eight weeks.

Yoga stretching: Stretching class of low-impact exercises designed for people of all ages and abilities in a Westernized format. Meets Thursdays 5-6 p.m. Cost is \$40 for eight weeks. Call Darrell Matula, instructor, at x38520 for more information.

Ballroom dancing: Classes meet Thursdays from 6:30-7:30 p.m. for beginner, 8:30-9:30 p.m. for intermediate and 7:30-8:30 p.m. for advanced. Cost is \$60 per couple.

Fitness program: Health-related fitness program includes a medical screening examination and a 12-week individually prescribed exercise program. For more information call Larry Wier at x30301.

Aikido: Martial arts class for men and women. Beginners meet Monday 6:30-7:30 p.m and Wednesdays 5-6 p.m. Advanced students meet Tuesday and Wednesday 5-6:30 p.m. No special equipment is needed. Aikido teaches balance and control to defend against an opponent without using force. Classes run monthly. Cost is \$45 per month. Visit a class for more information.

NASA BRIEFS

EUROPEAN SPACE AGENCY AND NASA SET NEW CASSINI-HUYGENS PLAN

Managers for an international mission to Saturn have announced a revised plan to work around a telecommunications problem and avoid loss of scientific data after the Cassini spacecraft releases the Huygens probe to descend to the surface of Titan, Saturn's biggest moon, in 2005.

The new plan will change the planned release date and geometry for the part of the mission in which the Huygens probe will parachute into the thick atmosphere of Titan. The new date will be Jan. 14, 2005, seven weeks later than originally planned. The plan will also position the Cassini orbiter farther away during that descent.

The Cassini-Huygens mission was launched in 1997. Engineers last year identified a design flaw in the Huygens communications system. Without a change in flight plans, the Huygens receiver would be unable to compensate enough for the Doppler shift in radio frequency between the signal emitted by the probe and the one received by the orbiter. A Doppler shift happens when the distance between a transmitter and receiver is changing, and Cassini originally would have been rapidly approaching Titan during Huygens' descent. This would have resulted in the loss of important data from the probe during its trip through Titan's atmosphere.

NEW SOLAR-POWERED HYPERION ROBOT STAYS IN SYNC WITH THE SUN

A new robotic explorer, smart enough to know when it's lost or in trouble and designed to follow the Sun in a whole new way, is ready to face its first test in the harsh elements of the Canadian Arctic.

The prototype robot, named Hyperion, has the potential to be self-sufficient and will help researchers test a technique called Sun-synchronous navigation. Sun-synchronous navigation involves tracking the Sun while exploring terrain. If Hyperion is successful, future autonomous robots could obtain continuous solar power for long-term exploration of distant planets and moons.

The robot must know its position and orientation with respect to the Sun while it explores its surroundings. It navigates to capture enough sunlight to power itself while traveling through rough terrain and trying to reach important scientific objectives.

The field experiments with Hyperion will take place in Nunavut, Canada, on the hilly, rock-strewn terrain of Devon Island, the largest uninhabited island in the world. There is a narrow window, between July 10 and July 20, to conduct the experiments.

Hyperion is a concept vehicle designed to operate only on Earth. Robots designed for flight missions would require specialized components, such as space-qualified motors and computers.